



An all-in-one sensor to unlock new insights

Overview

Verkada's SV11 is an all-in-one sensor for monitoring environmental changes in physical spaces. With a collection of powerful embedded sensors, the SV11 simultaneously measures air quality, temperature, humidity, motion, and noise.

The SV11 lends itself to a wide range of use cases. From monitoring air quality in manufacturing facilities to detecting temperature fluctuations in server closets, the SV11 offers a new kind of visibility and insight into physical spaces. For scenarios where an SV11 is used in a sensitive area, such as a bathroom or locker room, customers can opt to use the sensor without an associated camera, or can place one in an adjacent, safe-to-record area.

In addition to monitoring a wide range of environmental changes, the SV11 can detect vaping and smoking events. Schools, hotels, and other smoke-free facilities can monitor vaping and smoking behavior from Command, making it easy to conduct investigations and implement deterrence measures.

Industry-Leading 10-Year Product Warranty

All Verkada hardware purchases are backed by our 10-year limited warranty. For more information, visit verkada.com/support/terms-of-sale.

Get Started

With a collection of eight sensor readings, the SV11 lets you easily monitor the health and safety of your environments. Contact sales@verkada.com to request a 30-day free Sensor trial, including a new SV11 sensor and access to the Command management platform.



Verkada's Cloud-Based Sensor



Cloud-Based Sensor

Verkada's SV11 instantly connects to the cloud via Ethernet

Easy to Scale

No servers, databases, or on-prem clients to manage – simply just plug-in and monitor

Centralized Management

Modern platform enables secure access on any device from anywhere in the world

Benefits of Verkada's Cloud-Based Sensor Platform

Cloud Managed and Easy to Use

- Sensors come online and configure in minutes
- Managed from Verkada's web-based Command platform
- Secure remote access on any device, anywhere
- Automatic firmware updates keep sensors secure

Completely Customizable

- Users can quickly configure and customize sensors and alerts
- Choose what sensor data to monitor and display
- Receive real-time notifications if levels are detected outside of defined thresholds

Easily Visualize Data

- Color-coded sensor readings and data visualizations
- No training required, with one-click investigations
- Easily compare environmental data across any number of sensors or locations

Native Integration with Verkada Devices

- Out-of-the-box integration with other Verkada devices
- Associate Verkada cameras with sensors for increased visibility
- Events such as noise and motion can trigger an alarm, which will initiate a review of associated camera footage

10-Year Warranty on All Hardware





Visualize and display your environmental data with Dashboards



Environmental Sensor Dashboards allow organizations to easily visualize, analyze, and display readings across all of their SV11 sensors.

- Choose how to aggregate and visualize readings across locations, data types, or time periods
- Combine different data Tiles into a single dashboard to stay up-to-date at a glance
- Designed to be displayed on a big screen
- Keep employees, students, and visitors informed of current environmental conditions, such as indoor air quality



Sensor Overview

Verkada created recommended sensor value ranges based on data from the Environmental Protection Agency (EPA), the World Health Organization (WHO), the Occupational Safety and Health Administration (OSHA), and the American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE).

Color-coded sensor ranges are aligned to these government and industry standards for healthy indoor environments.

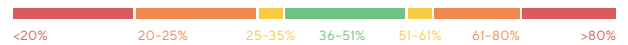
The SV11 can show the following data streams in Command

Temperature



SV11 temperature measurements are accurate from 23 °F – 122 °F. As with other data streams, users can customize temperature alerts if a space is kept at a temperature outside of the recommended green zone.

Humidity



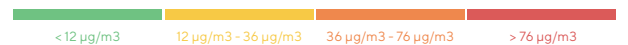
Relative humidity is the amount of moisture in the air compared to what the air can hold at that temperature

TVOC



A total measure of Volatile Organic Compounds, which are chemicals that evaporate into the air and are emitted by cleaners, paints, varnishes, fragrances, and hundreds of other products. Examples include benzene, ethylene glycol, and formaldehyde. VOCs are measured as a group because of their cumulative effects, with high TVOC values associated with negative health impacts.

PM 2.5



Particulate Matter 2.5 (PM 2.5) refers to tiny inhalable particles or droplets in the air that are less than 2.5 microns in width. These particles can have negative health effects, and are caused by dust, vehicle exhaust, burning fuels, cooking, smoking, and vaping.

Air Quality Index



The U.S. AQI measures total air pollution and provides benchmarks for healthy values. When AQI exceeds 100, air quality is unhealthy – at first for certain sensitive groups of people, then for everyone as AQI values get higher.

Vape Index



Verkada's Vape Index is a score derived from multiple sensors that is strongly correlated with vaping and/or smoking activity. Vape Index measurements outside of the green zone indicate suspected vaping/smoking activity, but could also reflect smoke or fumes from other sources. Smoke from cooking, burning fuel or wildfires may register highly on the Vape Index.

Noise Level



A measure of total noise level at the sensor. OSHA regulations state that noise levels cannot exceed 90 dB over an 8 hour period, or 95 dB over a 4 hour period.

Motion

A measure of changes in infrared light absorption caused by the motion of warm bodies, as measured by a passive infrared sensor. Powered by the same technology as motion sensors for intrusion detection, a motion event indicates human/animal motion or other large changes in infrared activity.



Sensors



Sensor Overview

Photochemically Etched Stainless Steel

Volatile Organic Compound Sensor

Particulate Matter Sensor

Motion Detection Sensor

Temperature & Humidity Sensor

Noise Sensor





Sensor

Tech Specs

Temperature¹

Sensor: CMOS, Operating Range: -5 – 50° C (23 – 123° F),
Typical Accuracy: ± 2.5° C (± 4.5° F), Max ± 3.5° C (± 6.5° F), Units: ° C / ° F

Relative Humidity

Sensor: CMOS, Operating Range: 0–80% non-condensing, Typical Accuracy: ± 5%, Max ± 10%, Units: %

PM 2.5

Sensor: Laser Scattering Optical Sensor, Range: 0 – 1000µg/m³, Typical Accuracy (0 – 100 µg/m³): ± 10µg/m³,
Typical Accuracy (100 – 1000 µg/m³): ± 10%_m, Units: µg/m³ (micrograms / cubic meter)

TVOC

Sensor: CMOS, Range: 0 – 60,000 Index, Typical Accuracy: ± 15%

Noise

Sensor: Microphone (not recording), Range: 20 – 120 dB SPL (A-Weighted),
Typical Accuracy: ± 5 dB, Units: dB (decibels)

Air Quality Index

Sensor: U.S. Air Quality Index, derived from multiple sensors, Range: 0 – 500

Motion

Sensor: Passive Infrared Sensor

Vape Index

Sensor: Proprietary formula derived from multiple sensors, Range: 0 – 100 index

Dimensions / Weight

Ø: 146 mm H: 59 mm, 720 g / 25.4 oz

Power

Power Consumption: 4W, Power Input: IEEE 802.3af PoE

Connectivity

RJ-45 cable connector for Network/PoE connection

LED Indicator

System power and status indicator

Operating Temperature

-5 – 50° C (23 – 123° F)

Compliance

FCC, CE, IC

Included Accessories

Setup guide, T10 security Torx screwdriver, screw pack, paper mounting template

¹ Based on standard recommended guidelines: Mounted on a non-metallic solid ceiling, facing down, away from windows, vents, and other sources of accelerated circulation, and away from direct sunlight.



Alarms Integration with Professional Monitoring for Environmental Sensors

Meet Your Virtual Guard

Verkada offers a 24/7 professional monitoring service to review and respond to events from your environmental sensors. Monitoring is provided by three fully redundant, U.S.-based, UL listed central stations with Five Diamond Certification from The Monitoring Association.

Assess the Situation

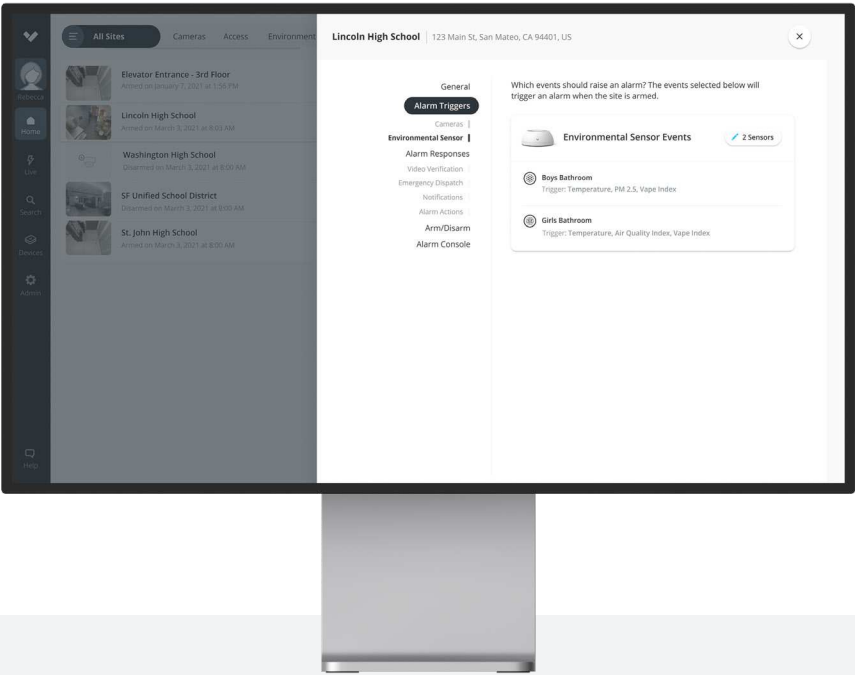
- Events from your SV11 Environmental Sensor (including motion and noise alerts) can be configured as alarm triggers. While your site is armed, agents will review video footage of these events from nearby cameras in real time.
- If the video footage reveals a threat to people or property, or if no nearby camera is available, an alarm will be raised.

Make Contact

- When an alarm is raised, agents will call and send SMS messages to the predetermined contact list.
- If there's a visible emergency in progress, agents will contact local emergency services immediately.

Take Action

- If a threat is confirmed by someone on the contact list, or if no one can be reached, agents will dispatch local first responders to the site address.
- All events can be reviewed, archived and accessed from Command for incident investigation.



Alarm License Pricing

Product Name	Description	Cost(MSRP) USD
LIC-BA-1Y	1-Year Alarm License	\$1,499
LIC-BA-3Y	3-Year Alarm License	\$3,999
LIC-BA-5Y	5-Year Alarm License	\$5,999
LIC-BA-10Y	10-Year Alarm License	\$11,999

LIC-BA Alarm License

Professional monitoring of Verkada Environmental Sensors is included in the Alarm License. The Alarm License includes access to the cloud-managed Verkada Alarms platform and unlimited review of events. One Alarm License is required for each unique site address, with no limit on monitored devices.



Ordering Information

Sensor Pricing

Product Name	Description	Cost (MSRP) USD
SV11-HW	SV11 Environmental Sensor Hardware	\$1,199
LIC-SV-1Y	1-Year Sensor License	\$249
LIC-SV-3Y	3-Year Sensor License	\$599
LIC-SV-5Y	5-Year Sensor License	\$999
LIC-SV-10Y	10-Year Sensor License	\$1,999

Alarm License Pricing

LIC-BA-1Y	1-Year Alarm License	\$1,499
LIC-BA-3Y	3-Year Alarm License	\$3,999
LIC-BA-5Y	5-Year Alarm License	\$5,999
LIC-BA-10Y	10-Year Alarm License	\$11,999